

REMARKS

Reconsideration of the application and claims in light of the following remarks is respectfully requested.

I. Status of the Claims

Claims 29-33 are currently pending. The previous listing of claims herein is presented as a courtesy to the Examiner.

II. Replacement Drawing

Applicants provide a revised drawing sheet for FIG. 4 to correct several typographical errors, and respectfully request that the revised drawing sheet be accepted and entered.

III. Rejections under 35 U.S.C. § 112

Claims 29-33 stand rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the enablement requirement. Applicant respectfully traverses the rejection.

Examiner contends that the “eighth means for judging that the preceding vehicle is not traveling in front of the travel path of the own vehicle in a case where the adjusted parameter is larger than a threshold value and outputting a signal,” is not enabled. Specifically, Examiner contends that it is unclear whether the time in step S310 refers to the time in step S308 or the time in step S309 and that step S311 is contrary to steps S304, S305, S308, S309 and S310. Applicant respectfully disagrees.

Referring to Figure 4 and paragraphs [0053]-[0078] of U.S. Patent Publication 2004/0060756 (which is based upon the specification for the present application), Applicant describes the routine of determining the evacuation possibility of a preceding vehicle. First, at step S301 it is determined whether a preceding vehicle exists. If there is no preceding vehicle, the parameter TIME is reset. On the other hand, if a preceding vehicle is sensed, the program determines at step S304 how far ahead the preceding vehicle is using the parameter CAL. If the

preceding vehicle is so far away that the evacuation possibility need not be determined, the routine proceeds to step S306 where the parameter TIME is reset. However, where the preceding vehicle is within a range ($kpo < 17$) that the possibility of evacuation must be determined, the routine sets the parameter TIME at step S308 based on the lengthwise (segment kpo) and the widthwise (parameter CAL) displacement of the preceding vehicle from the own vehicle. *See paragraphs [0058]-[0075] and Figure 6 for the disclosure of what value time is set to based on the value of segment kpo and parameter CAL.* Once the value of TIME is set in step S308, it is **adjusted** in step S309 based on the presence of solid objects other than the preceding vehicle. Specifically, in paragraphs [0076]-[0077], Applicant describes that where a traveling solid object enters the field of $kpo \pm 1$, the parameter TIME is adjusted upwards by 10. Finally, at step S310, the value of the parameter TIME is compared to a predetermined threshold value. If TIME is less than the threshold value, the program indicates at step S307 that there is **no** possibility that the preceding vehicle may exit from the path of the own vehicle. On the other hand, If TIME is greater than the threshold value, then the program indicates at step S311 that there **is** a possibility that the preceding vehicle may exit from the path of the own vehicle.

Accordingly, steps S308 and S309 do **not** refer to different times; rather, the parameter TIME is set in step S308 and is **adjusted** upwards in step S309 if a traveling solid object other than the preceding vehicle is sensed. In step S310, the **adjusted parameter** TIME is compared to a threshold value. Since TIME is a positive indicator of evacuation of the preceding vehicle, step S311 indicates that such a possibility **does** exist if TIME is greater than the threshold value.

As best understood, it is Examiner's contention that TIME merely indicates how long a preceding vehicle has been in the path of the own vehicle and that where the preceding vehicle has been blocking this path for more than the threshold value, it should indicate that there is no possibility of evacuation. Specifically, Examiner states that "step S310 indicates that a vehicle has been in a path in front of a preceding vehicle in a time greater than 100 i.e. the time is larger than a threshold value of 100." However, as discussed above and as claimed, the parameter TIME is set "in response to both a lengthwise and a widthwise distance of the preceding vehicle from the own vehicle." Thus, the parameter TIME is set by the location of the preceding vehicle, not by the time

of interference with the own vehicle path. Specifically, the parameter TIME is set by a determination of which Region I-IV of Applicant's Figure 6 that the preceding vehicle is located. Further, as described by Applicant in paragraphs [0064] and [0069], the parameter TIME accounts for the possibility that the preceding vehicle is traveling around a curve. Consequently, the parameter TIME, when over a threshold value, is a positive indication that there is a possibility that the preceding vehicle has evacuated and is NOT in the path of the own vehicle. Thus, the description in the specification as support of step S311 and the eighth means as claimed are consistent.

In accordance with the foregoing arguments, Applicant respectfully submits that claim 29 is fully enabled.

IV. Rejections under 35 U.S.C. § 102

Claims 29-33 stand rejected under 32 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 6,122,597 issued September 19, 2000 to Saneyoshi et al. ("Saneyoshi"). Applicant respectfully traverses the rejection.

Saneyoshi does not describe "means for **adjusting the parameter** in a case where any forward traveling object other than the preceding vehicle is detected." Rather, Saneyoshi describes that a distance image is processed by a group filter processing section, an object data extracting section and an object distance detecting section. *See Saneyoshi, Figure 3*. The function of the foregoing is to eliminate false data by reading data of adjacent blocks and grouping blocks having a similar deviation (*see Saneyoshi, col. 5, lines 23-33*), extracting data from larger groups (number of adjacent blocks > than a threshold value) located above the road surface (*see Saneyoshi, col. 5, lines 10-16*) and determining the distance of the solid object from the own vehicle (*see Saneyoshi, col. 5, lines 16-22*). A histogram is created having deviation amounts, or divisions, in front of the own vehicle and where the frequency of object data points within a division first exceeds a threshold value, it is determined that a solid object exists at that division. *See Saneyoshi, Figure 13 and col. 8, lines 33-43*. Thus, Saneyoshi describes a method of determining the distance of solid objects from the own vehicle **separately**. *See, e.g., Saneyoshi, Figure 14*.

Accordingly, Saneyoshi is directed to a method of isolating solid objects and data therefor to obtain vehicle surroundings information that is free from noise. Again, the first step described by Saneyoshi after obtaining the distance image is separating it into groups representative of different solid objects in space (i.e., the group filter processing step); no information is processed or changed due to the existence of additional solid objects. Thus, there is no parameter set in response to a lengthwise and a widthwise distance of the preceding vehicle that is **adjusted** based on a forward traveling object other than the preceding vehicle as presently claimed by Applicant in independent claim 29. Claims 30-33 depend from claim 29, and therefore, Applicant respectfully submits that they are allowable for at least this reason.


CONCLUSION

In view of the foregoing arguments, each of the presently pending claims in this application is believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to pass this application to issue.

If there are any other issues remaining which the Examiner believes could be resolved through either a Supplemental Response or an Examiner's Amendment, the Examiner is respectfully requested to contact the undersigned at the telephone number indicated below.

Dated: January 23, 2009

Respectfully submitted,

By 

Thomas J. Bean

Registration No.: 44,528
DARBY & DARBY P.C.
P.O. Box 770
Church Street Station
New York, New York 10008-0770
(212) 527-7700
(212) 527-7701 (Fax)
Attorneys/Agents For Applicant